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PROJECT NO. 52373

**REVIEW OF WHOLESALE
ELECTRIC MARKET DESIGN**

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**PUBLIC UTILITY COMMISSION
OF TEXAS**

One of the challenges currently facing the Commission is to find ways to encourage additional investment in dispatchable generation that addresses the intermittency of renewable resources. The Commission, Chief Nim Kidd, and other policymakers have repeatedly asked for ideas from stakeholders, and we are seeking to be responsive to those requests with this filing.

We believe that the proposal below will support the efforts of our company and other stakeholders to build more fast-start, dispatchable generation, and to do so more quickly than the current market design supports. This proposal is market-based, fully competitive, and works well within existing ERCOT ancillary service product designs.

FIRM DISPATCHABLE GENERATION INVESTMENT PROGRAM

Proposal for Increasing Investment and Reliability in ERCOT

Regulators and legislators have called for market improvements in response to weather events and the evolving market conditions. We would summarize these requested changes as follows:

- Improve reliability
- Achieve investment
- Address intermittency and ramping concerns

With the current Biden proposal and the potential implementation of a solar production tax credit, ERCOT will likely be faced with increasing reliability challenges, along with ramp and intermittency issues as solar and wind growth continues. A critical component of achieving the PUCT's stated goal of improving reliability and addressing intermittency and ramping concerns, is ensuring the addition of firm fast start dispatchable generation. This type of generation responsibly and cost effectively provides firming energy to address renewable generation intermittency and improve reliability.

WattBridge has financed and brought to commercial operation, or currently has under construction, 1830 MW's of fast start dispatchable generation in ERCOT over the last 20 months. The most significant challenge to companies like WattBridge continuing to add this critically needed resource is access to capital. A market-based product that provides certainty of a minimum level of financial performance would be very beneficial to continued deployment of dispatchable fast start generation by enabling affordable capital sourcing. Renewable generation does not face this same challenge as a result of the

guaranteed financial performance provided by the use of tax and renewable energy credits. These credits effectively act as a capacity payment to renewable generation.

This proposal addresses reliability and investment need with a market-based approach that would only provide a floor to market revenues through the existing market structure and avoid payment to entities not directly contributing to capital investment. This would be in addition to other necessary market design changes being considered by the Commission. We strongly believe this type of approach will be beneficial by increasing investment in ERCOT, as opposed to just maintaining an existing generation fleet, and effectively bridging the gap between renewables and the existing generation base.

Current Capital Raise Approach

- Independent Power Producers (“IPPs”) generally finance their power plants with traditional project financing from large commercial banks and other institutional lenders based on the strength of the commercial contracts behind individual projects.
- Lenders size the debt for a project based on their confidence in the cash flows to pay interest and principal on the debt over a set period of time.
- Lenders gain confidence in the cash flows where there is a recurring capacity payment paid via a regulated market (e.g., PJM NYISO, ISO NE capacity payment) or in a bilateral contract with an offtaker. Renewable resources benefit from additional channels of revenue in the form of federal and/or state tax credits and renewable energy credits.
- Absent a capacity-type payment, Lenders apply a deep discount to the uncontracted cash flows of a project making most projects uneconomical for IPP project developers to finance or requiring the use of contracts with bilateral financial intermediaries.
- In ERCOT, IPP project developers obtain bilateral contacts with wholesale financial intermediaries (i.e., investment banks, other trading entities) that provide Heat Rate Call Options (“HRCOs”) as an offtake structure to provide a recurring levelized revenue stream to the project in exchange for the commodity value of the power produced at the project. The offtaker prices the HRCO based on a view of the future commodity value of power while retaining significant upside value for fluctuations in market prices.

Proposal to Increase Investment in ERCOT

To alleviate the reliance on HRCOs and to enable deployment of more firm fast start dispatchable generation, this proposal calls for the State to provide to this type of new generation either a minimum guaranteed “back-stop” price or “energy back-stop rate”. This approach gives lenders the comfort the debt will be repaid while avoiding a cash outlay by the State.

Guaranteed “Back-stop” Price; “Energy Back-stop Rate”

- A minimum guaranteed “back-stop” price of \$5.50/kW-month on an average annual basis over a 10-year period would serve as a substitute for HRCO pricing when an IPP project developers seek financing to ensure sufficient revenue to repay the debt.

- Alternatively, an “energy back-stop rate” of \$7.43/MWh per year over a ten year period could serve as a backstop to give Lenders comfort that the debt will be repaid.
- ERCOT can create this floor price for selected resources for this program in a fashion similar to a reliability must-run (RMR) contract. The RMR contract is between ERCOT and the resource to effectuate this floor value.

An IPP project developer with a reasonable cost structure should be able to repay the debt within a five-year period by retaining the value of the energy and ancillary values rather than selling it to a HRCO offtaker.

Generation Resource Criteria

As part of this proposal for the State in providing a minimum guaranteed “back-stop” price or “energy back-stop rate” the following criteria should be considered:

- New generation is added to ERCOT
- 10-minute start capability
- 48 hour minimum run duration capability; 1 hour maximum downtime
- Black start capable
- Voltage support
- Pipeline sourcing for natural gas supply and transport source with proven performance during URI, or improvements implemented by the pipeline since URI that would ensure future performance

Benefits to the State and Investors

This proposal would enable IPP project developers to obtain financing from lenders for their projects without the need for a HRCO to support the financing and provide significant benefits to the State and investors:

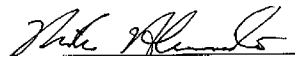
- The additional value retained by the project (rather than sold to the HRCO offtaker) would enable a faster repayment of the debt ensuring greater stability for the project.
- The project will have greater equity value and/or distributions that can enable further redeployment of equity in additional projects in Texas.
- As an example, having this type of product would incent WattBridge to build up to an additional 3,000 to 5,000 MW’s over the next three to five years, and we believe that other ERCOT market participants would respond similarly.
- The minimum guaranteed “back-stop” price or “energy back-stop rate” will serve as backstop for financing purposes but should not require payment by the State based on the expected actual market value of energy/ancillary services and pending market design changes.
- The State enables fast start dispatchable generation to enhance reliability, at little to no cost to the State and withing an existing market structure.

- This proposal would be implemented quickly as an additional ancillary product without significant market or ERCOT system changes.
- Fast start, dispatchable generation complements and supports current renewable resources and anticipated further growth in renewable energy via a competitive market-based solution rather than through out-of-market approaches.

In summary, WattBridge believes this proposal provides support for immediate development of fast start dispatchable generating assets in ERCOT within the current market framework in a manner that is relatively easy to implement and does not put a significant financial burden on the State. We appreciate the opportunity to present this proposal and are available to answer questions or provide additional information at your convenience.

Dated: November 10, 2021

Respectfully submitted,



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